



# MD 5 CORRIDOR TRANSPORTATION STUDY



## INFORMATIONAL PUBLIC WORKSHOP DISPLAY BOARDS

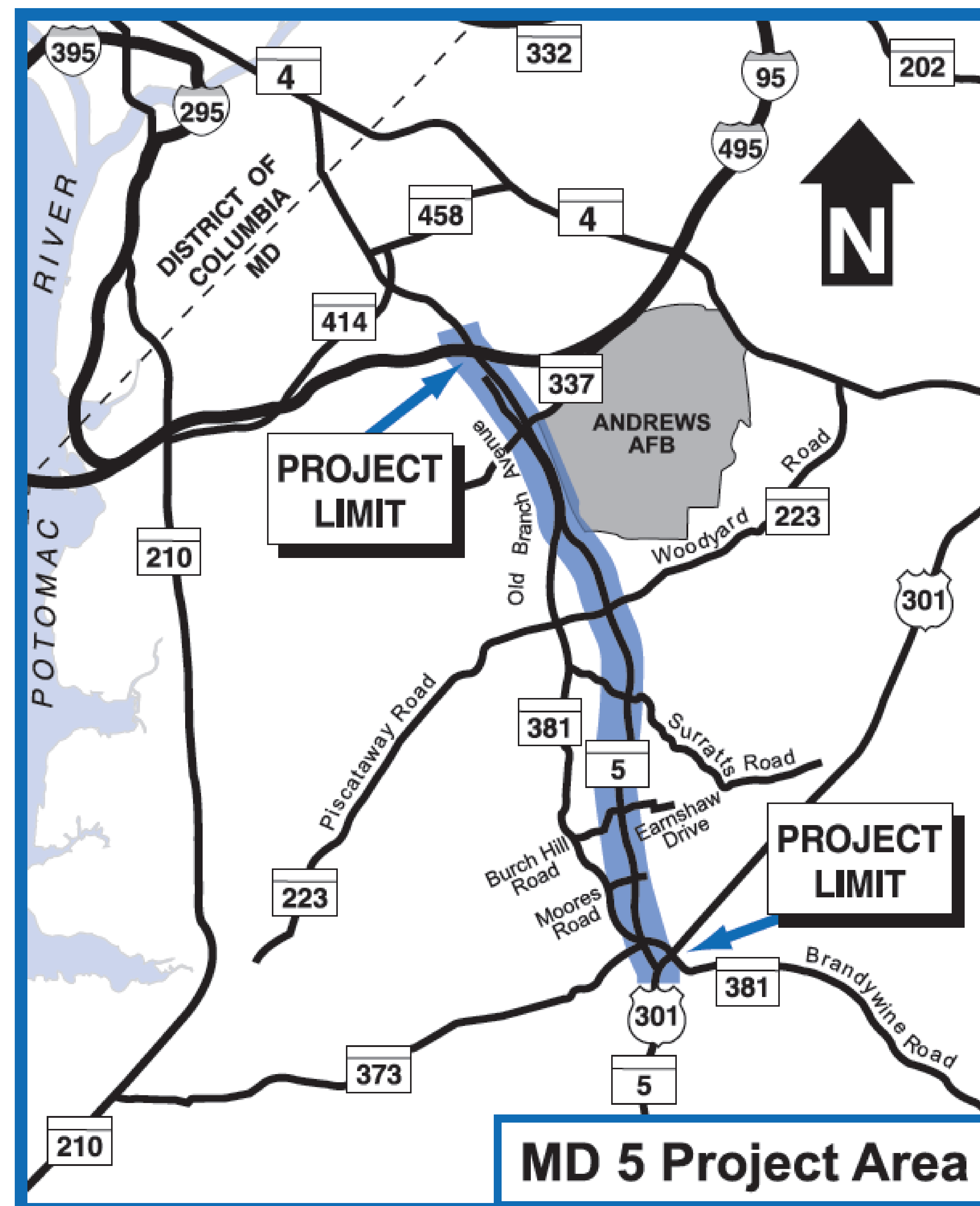
**February 24, 2009**

5:00 PM – 8:00 PM

Surrattsville High School Cafeteria  
6101 Garden Drive, Clinton, MD 20735.

## Purpose of the Meeting

- Provide study area residents with project updates and information
- Present the Alternatives Retained for Detailed Study (ARDS)
- Receive your input on the ARDS





## Why Is This Project Needed?

- **Heavily traveled commuter corridor connecting southern Maryland and Virginia to Washington, D.C.**
- **Traffic volumes are expected to increase by 15 % - 30% by 2030**
- **Currently, all five at-grade intersections are at capacity during either the AM or PM peak period**
- **Sections of MD 5 have crash rates that are significantly higher than the average statewide rate**
- **Heavily developed areas exist in the northern portion of the corridor and a large increase in development is expected in the southern portion**



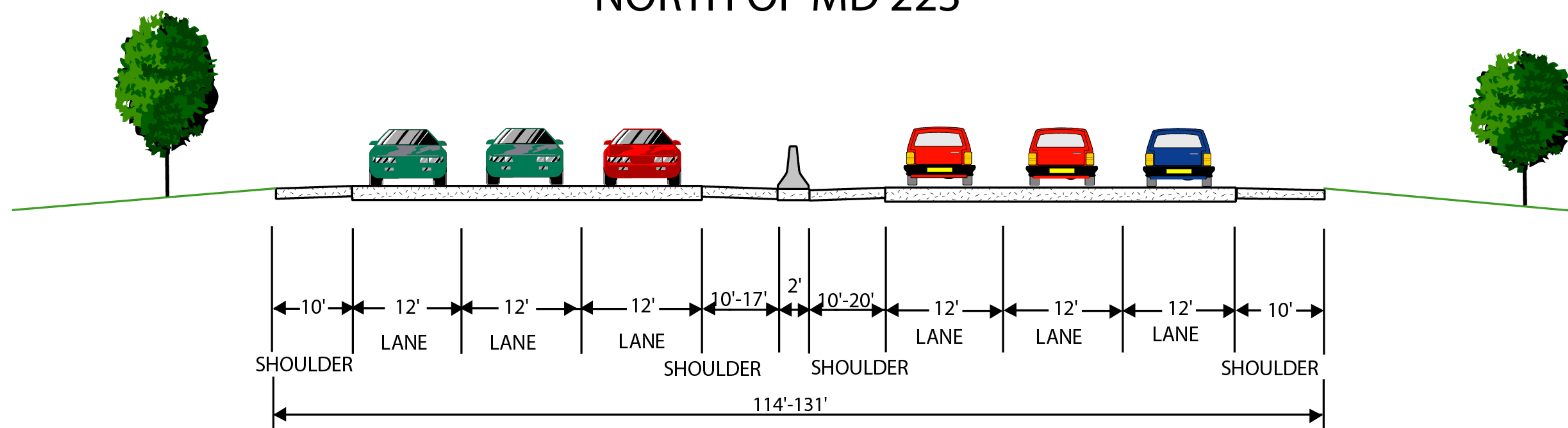
## Purpose and Need

- **To facilitate safe and efficient traffic flow while providing cost-effective transportation infrastructure to serve and support existing and future traffic demand, land use planning, and development efforts, while enhancing and facilitating transit services.**
- **In order to maintain the integrity of the interstate system, the study must also consider the potential impacts to I-95/I-495 when improving traffic operations along northbound MD 5.**

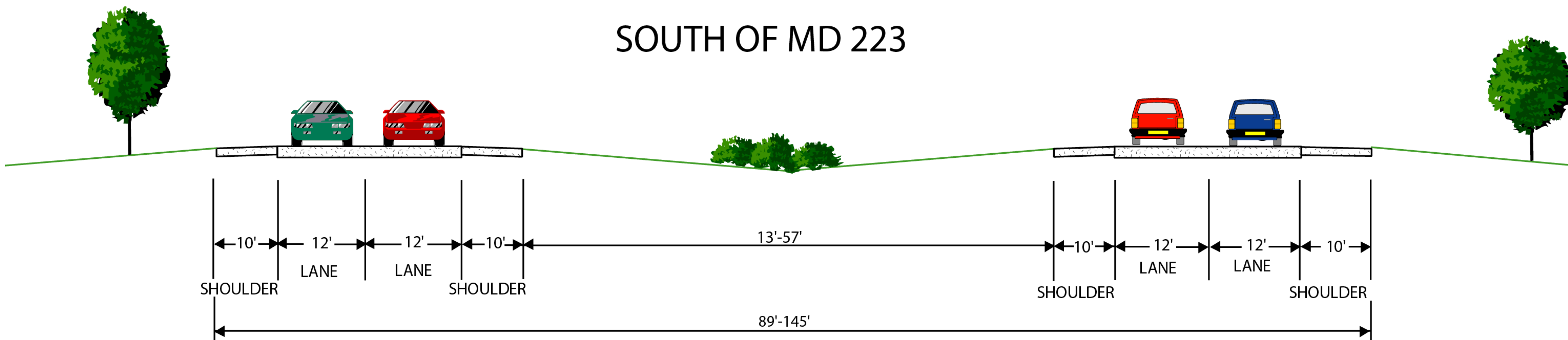


## Existing Typical Section

NORTH OF MD 223

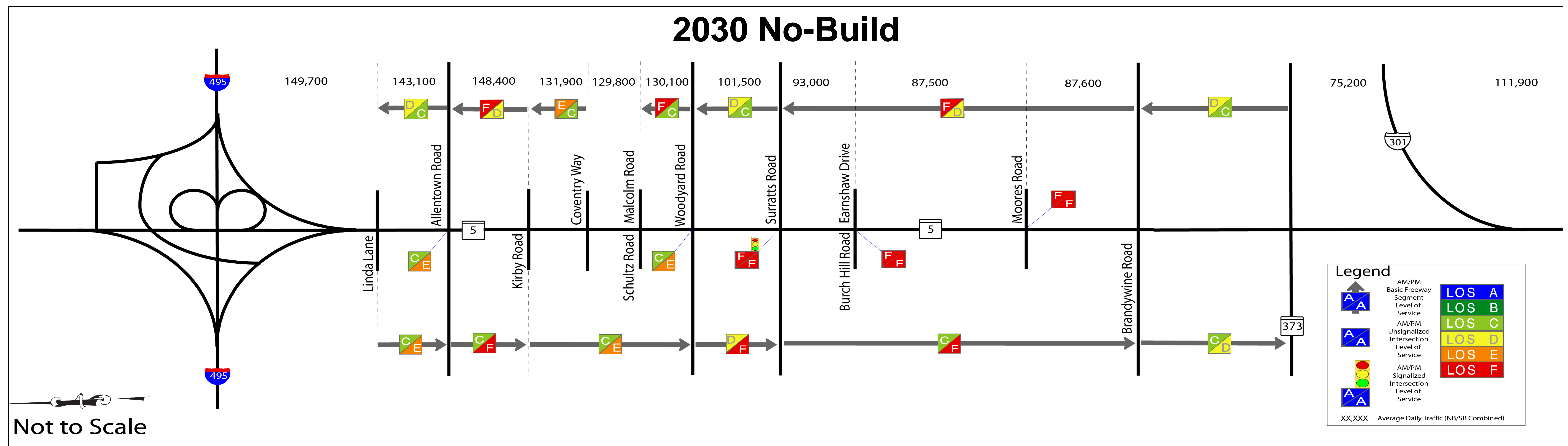
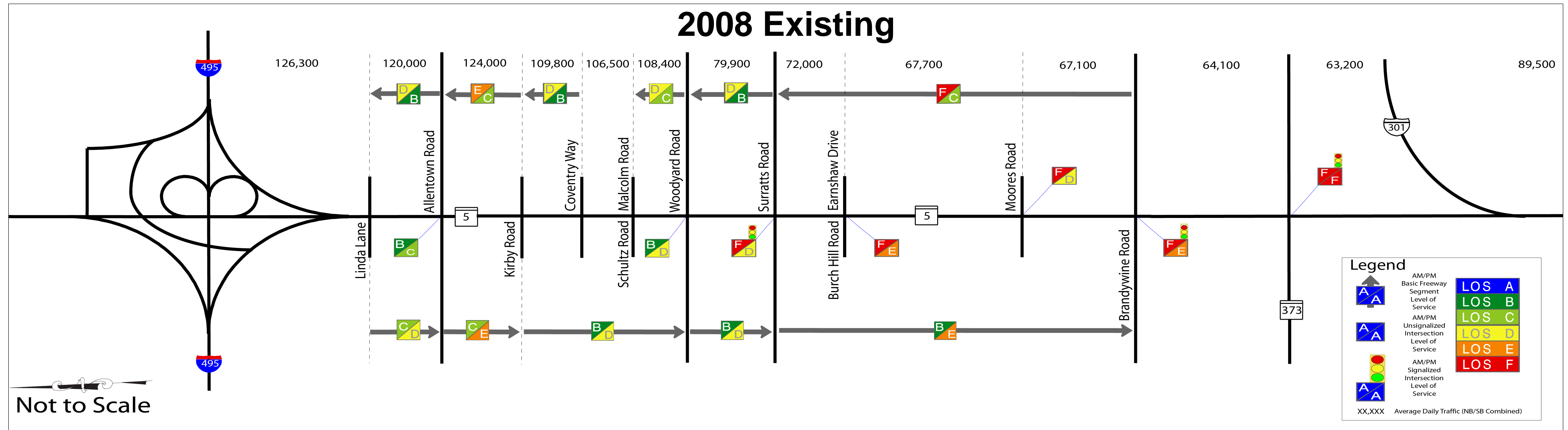


SOUTH OF MD 223





## Existing and No-Build Level of Service





## Safety Statistics - 2005 to 2007

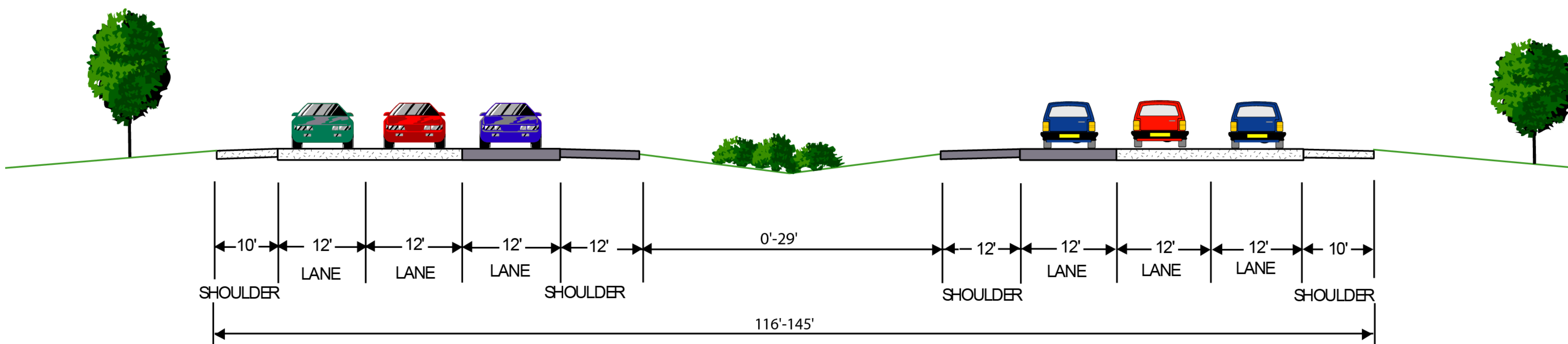
MD 5 Sections	Crash Type			Total Crashes	Average Total Crash Rate ^	Statewide Average Total Crash Rate ^	Crash Types Significantly Higher than Statewide Rates*
	Fatal	Injury	Property Damage				
US 301 to Brandywine Road	0	27	34	61	192.8 *	63.1	Rear End, Sideswipe, Left Turn, Angle
Brandywine Road to MD 223	3	173	165	341	88.9	127.5	None
MD 223 to Old Alexandria Ferry Road	2	38	65	105	67.6 *	47.3	Opposite Direction, Parked Vehicle, Fixed Object
Old Alexandria Ferry Road to MD 337	0	17	29	46	28.5	47.3	Nighttime, Alcohol Related
MD 337 to I-95/ I-495 (Capital Beltway)	1	53	89	143	92.6 *	47.3	Rear End, Sideswipe, Angle, Fixed Object

^ per 100 million vehicle miles traveled

\* Significantly higher than statewide average for similarly designed roadways



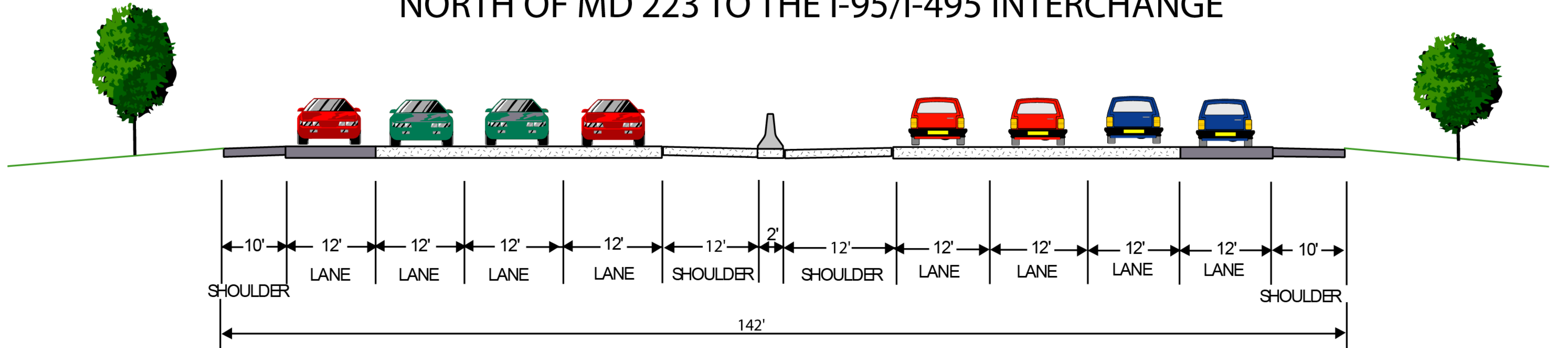
## Alternative 3: Expressway Upgrade South of MD 223



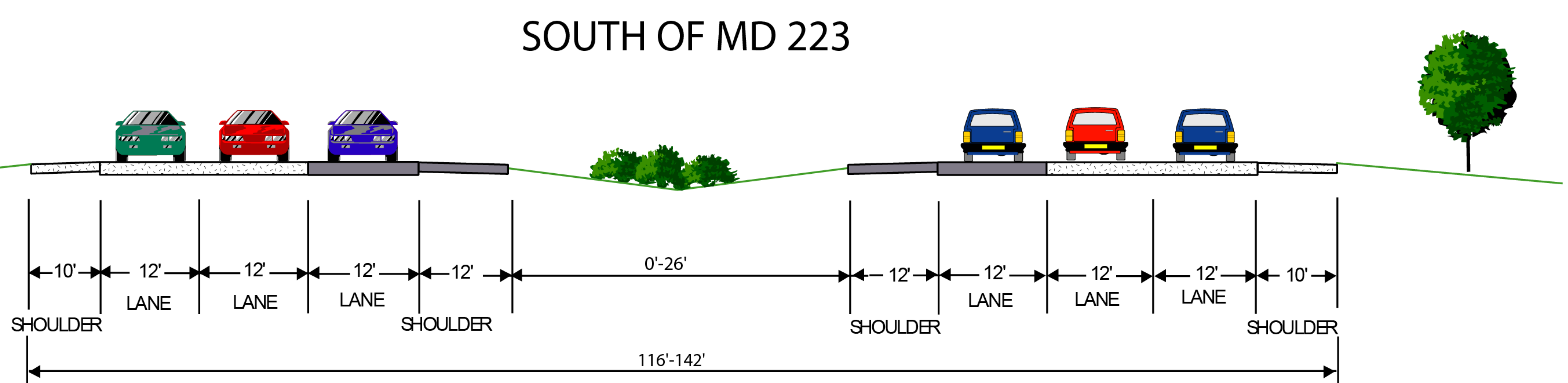


## Alternative 4: Expressway Upgrade Entire Corridor

NORTH OF MD 223 TO THE I-95/I-495 INTERCHANGE



SOUTH OF MD 223





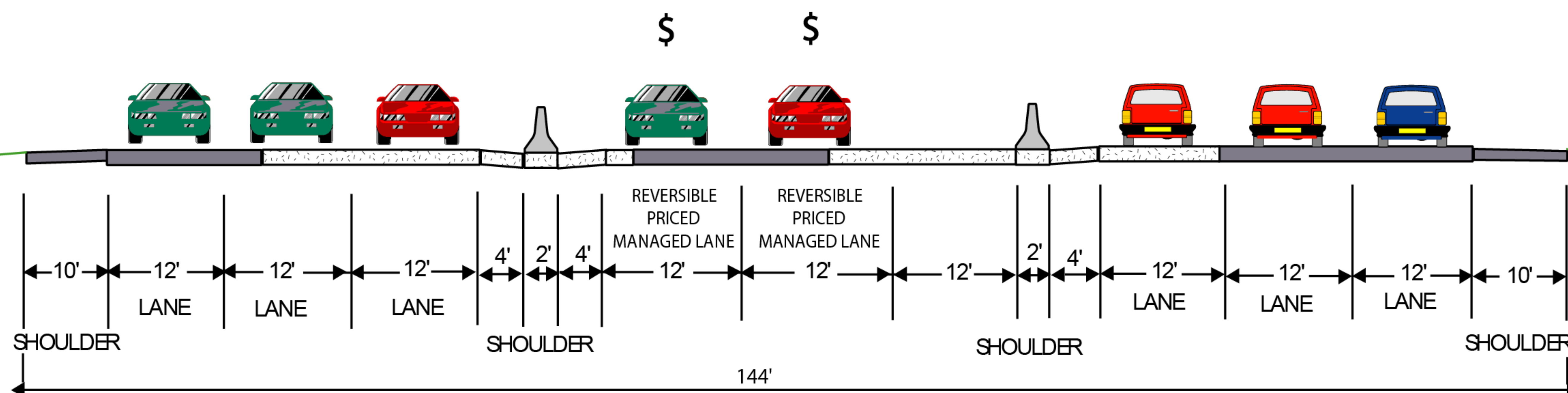
## What are Managed Lanes?

- Lane management strategies have been used by agencies for decades to provide reliable, relatively free-flowing travel in highly congested corridors
- Managed lanes may include High Occupancy Vehicle (HOV) lanes, High Occupancy Toll (HOT) lanes and Express Toll Lanes (ETL), and exclusive or special-use lanes (such as car-only, bus-only, or truck-only lanes)
- Generally lanes are “managed” by using one or a combination of these strategies:
  - Pricing - tolls that can vary based on roadway congestion, time of day, vehicle occupancy, or access to specific areas
  - Vehicle Eligibility - HOV, truck restrictions
  - Access Control - reversible lanes, express lanes

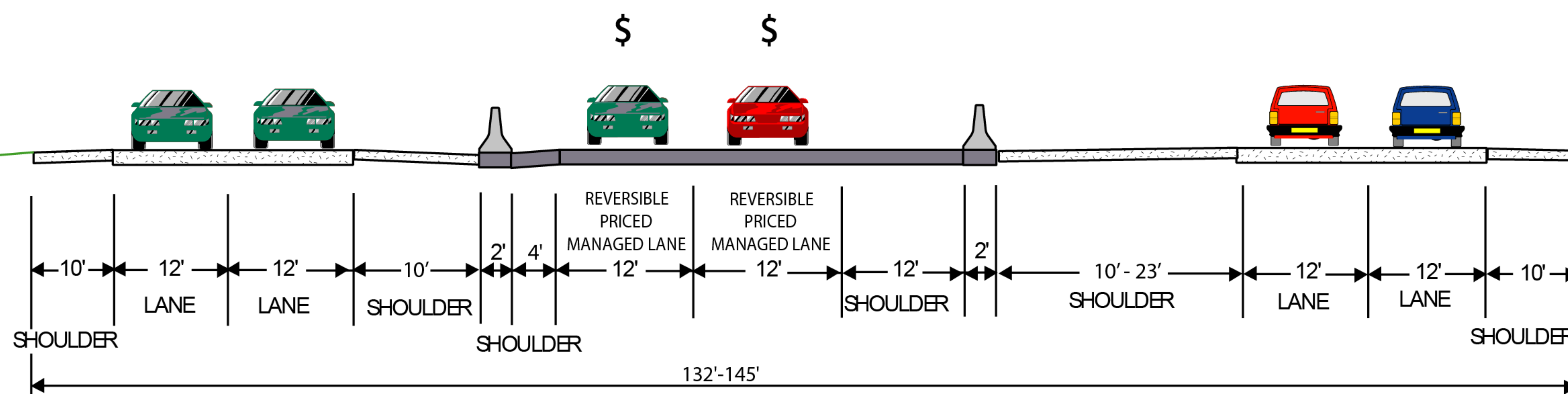


## Alternative 5: Two-Lane Reversible Priced Managed Lanes

NORTH OF MD 223



SOUTH OF MD 223

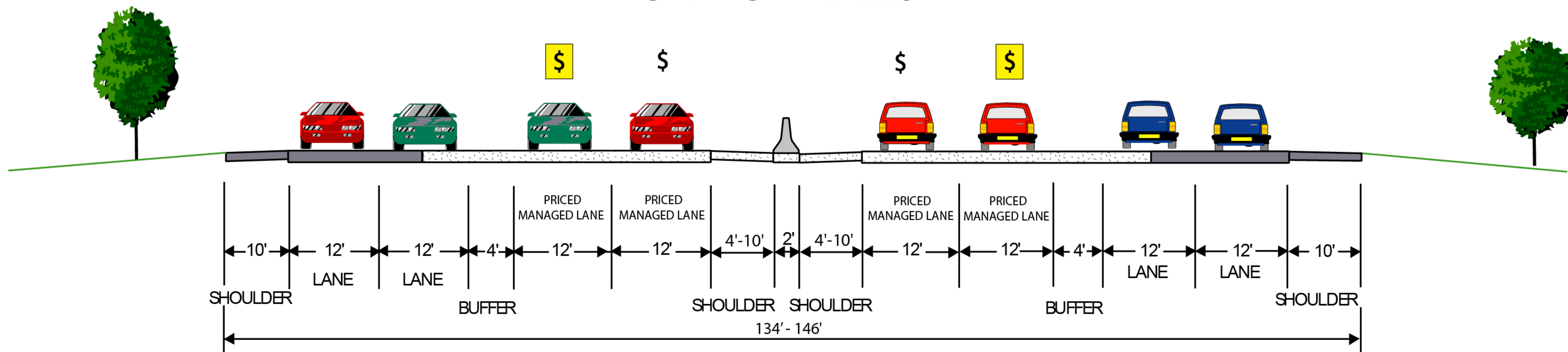


\$ - New Priced Managed Lane

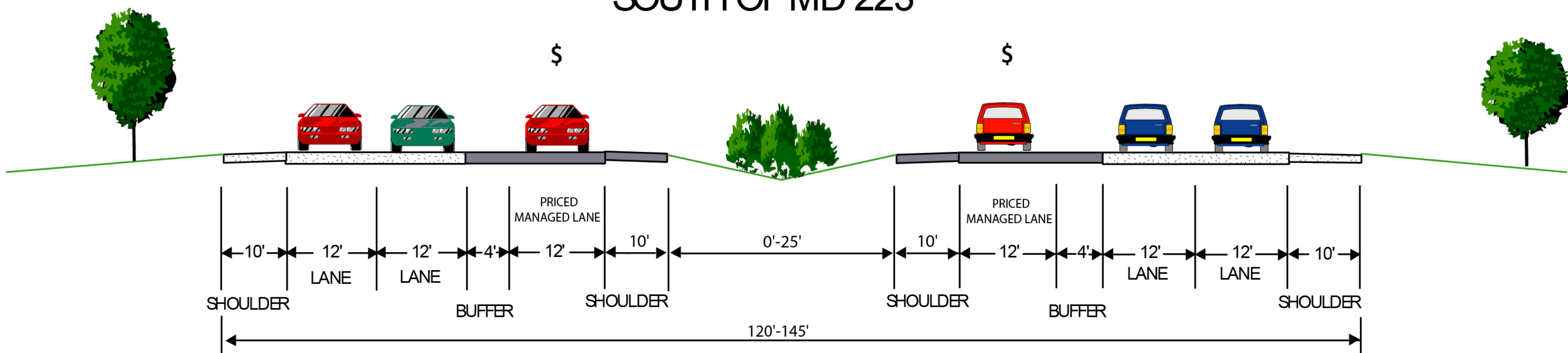


## Alternative 6: One to Two Lane Priced Managed Lanes

### NORTH OF MD 223



### SOUTH OF MD 223



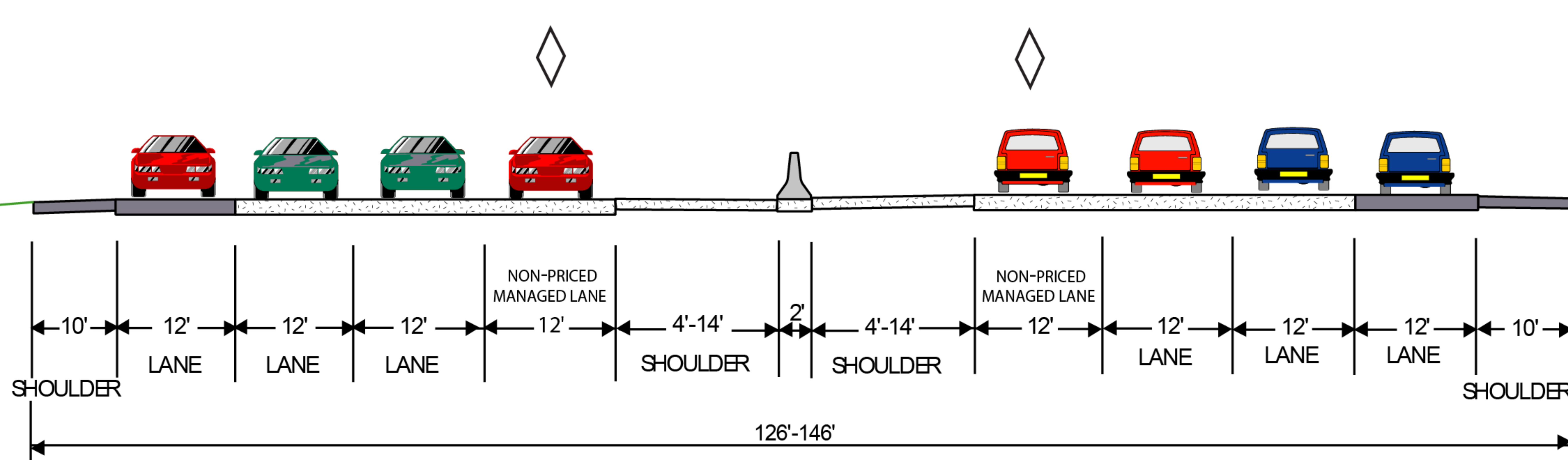
\$ - New Priced Managed Lane

\$ - Existing Lane Converted to Priced Managed Lane

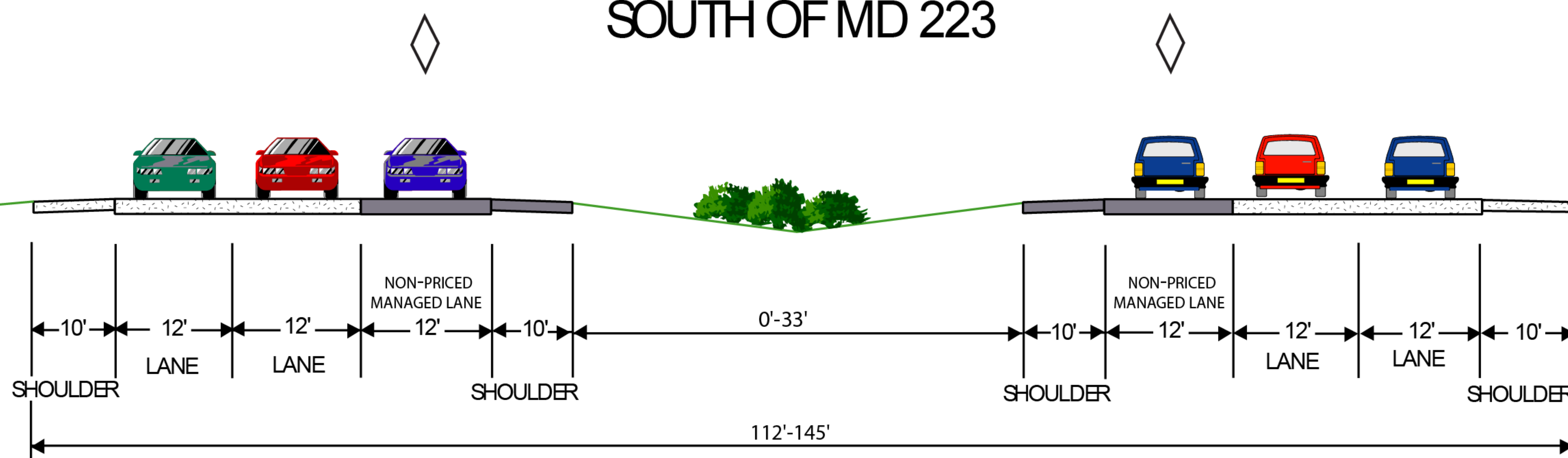


## Alternative 8: Non-Priced Managed Lanes

NORTH OF MD 223



SOUTH OF MD 223



◇ - New Non-Priced Managed Lane





# MD 5 CORRIDOR TRANSPORTATION STUDY



## Summary of Environmental Impacts and Costs

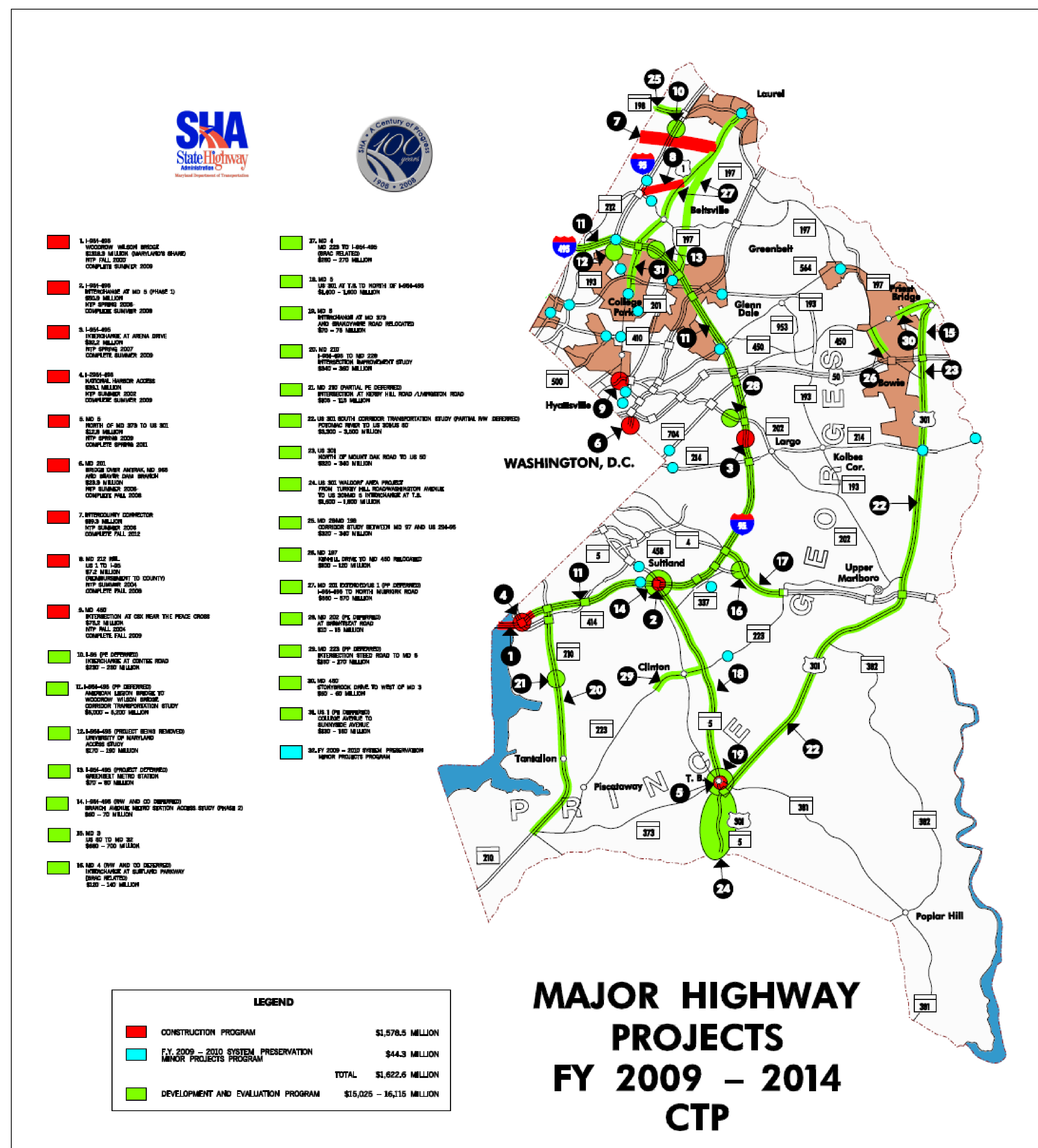
Impact Types	No Build	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 8	Surratts Road Interchange		Burch Hill Road Interchange	
							Opt. A	Opt. B	Opt. A	Opt. B
<b>Displacements (number)</b>										
Residential	0	0	0	2	2	0	1	1	0	0
Business/Commercial	0	0	0	2	2	1	1	0	0	0
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>4</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>0</b>
<b>Properties Impacted (number)</b>										
Residential	0	6	42	69	59	58	12	17	33	16
Business/Commercial	0	1	58	58	63	63	10	11	2	8
Parkland	0	0	0	0	0	0	0	0	0	0
US Government	0	0	15	21	19	19	0	0	0	0
Agricultural	0	0	0	0	0	0	0	0	2	1
<b>TOTAL</b>	<b>0</b>	<b>7</b>	<b>115</b>	<b>148</b>	<b>141</b>	<b>140</b>	<b>22</b>	<b>28</b>	<b>37</b>	<b>25</b>
<b>Right-of-Way Area Required (acres)</b>										
Residential	0	4	5	16	13	8	5	3	15	13
Business/Commercial	0	1	10	22	22	21	7	7	0	1
Parkland	0	0	0	0	0	0	0	0	0	0
Agricultural/US Government	0	0	1	1	1	1	0	0	5	2
<b>TOTAL</b>	<b>0</b>	<b>5</b>	<b>16</b>	<b>39</b>	<b>36</b>	<b>34</b>	<b>12</b>	<b>10</b>	<b>20</b>	<b>16</b>
<b>Selected Natural Environment Impacts</b>										
100 - Year Floodplain Affected (acres)	0	1.0	4.4	4.3	4.9	5.4	0.3	2.6	1.9	1.6
Wetlands Affected (acres)	0	1.1	2.4	2.5	3.7	3.3	1.7	1.6	1.5	0.6
Streams (linear feet)	0	8,575	20,621	23,104	22,507	21,945	4,299	4,278	4,505	7,078
Woodlands Affected (acres)	0	3.9	17.5	23.2	19.4	19.0	10.0	9.8	27.8	24.6
<b>Cost Ranges (Millions \$)</b>	<b>0</b>	<b>550-610</b>	<b>1,130-1,190</b>	<b>1,050-1,110</b>	<b>1,190-1,250</b>	<b>1,150-1,210</b>	<b>40-45</b>	<b>55-60</b>	<b>55-60</b>	<b>65-70</b>

Note: Total costs and impacts are calculated by adding a mainline alternative plus interchange option for Surratts Road and Burch Hill Road. Costs for ramp improvements at the Capital Beltway and Woodyard Road are included in the base estimate for each mainline alternative.



# MD 5 CORRIDOR TRANSPORTATION STUDY

- CTP
- Print as is; no frame





## Remaining Steps in the Project Planning Process

### Winter 2008 - 2009

- Summarize/Address Comments Received at the Informational Workshop

### Fall 2009

- Finalize Detailed Engineering and Environmental Studies

### Winter 2009 - 2010

- Complete Draft Environmental Document
- Conduct Location/Design Public Hearing

### Summer 2010

- Select Alternative and Complete Conceptual Mitigation

### Fall 2010

- Complete Final Environmental Document

### Winter 2010 - 2011

- Obtain Location/Design Approval – Project Planning Ends

Public Input Throughout